Keep this User's Guide at hand for quick reference at any time it may be required.
Read "SAFETY NOTES" first, then set up this kit.
Provide this User's Guide along with this kit when you transfer to the third party.

N8143-56F/56E Rack Conversion Kit User's Guide

Preface

This product is mechanical parts for installing NEC Express server into 19-inch rack system.
Read this document and the manual of the NEC Express server to understand installation method before installing this product to the server.

SAFTY NOTES

Follow instructions given in this document for proper installation and safe use of the server.
Refer to the User's guide of the NEC Express server regarding the safety indications.

Caution	
	Install this kit only to the server which define as optional parts. Failure to follow these instructions may cause the server to operate incorrectly and/or personal injury or damages of surrounding servers to occur.
	More than two persons are required to carry or install the rack. Failure to follow this instruction may cause the rack to fall to result in personal injury and/or breakage of surrounding servers.
	Read this document and the manual of the NEC Express server to understand installation method before installing this product to the server. Failure to follow these instructions may cause the server to operate incorrectly and/or personal injury or damages of surrounding servers to occur.
	Attach cables not to contact the slide rail assembly and neighboring units. Failure to follow these instructions may cause the server to operate incorrectly and/or personal injury or damages of surrounding servers to occur.
	Do not disassemble, repair, or modify the server. Otherwise, an electric shock or fire may be caused.

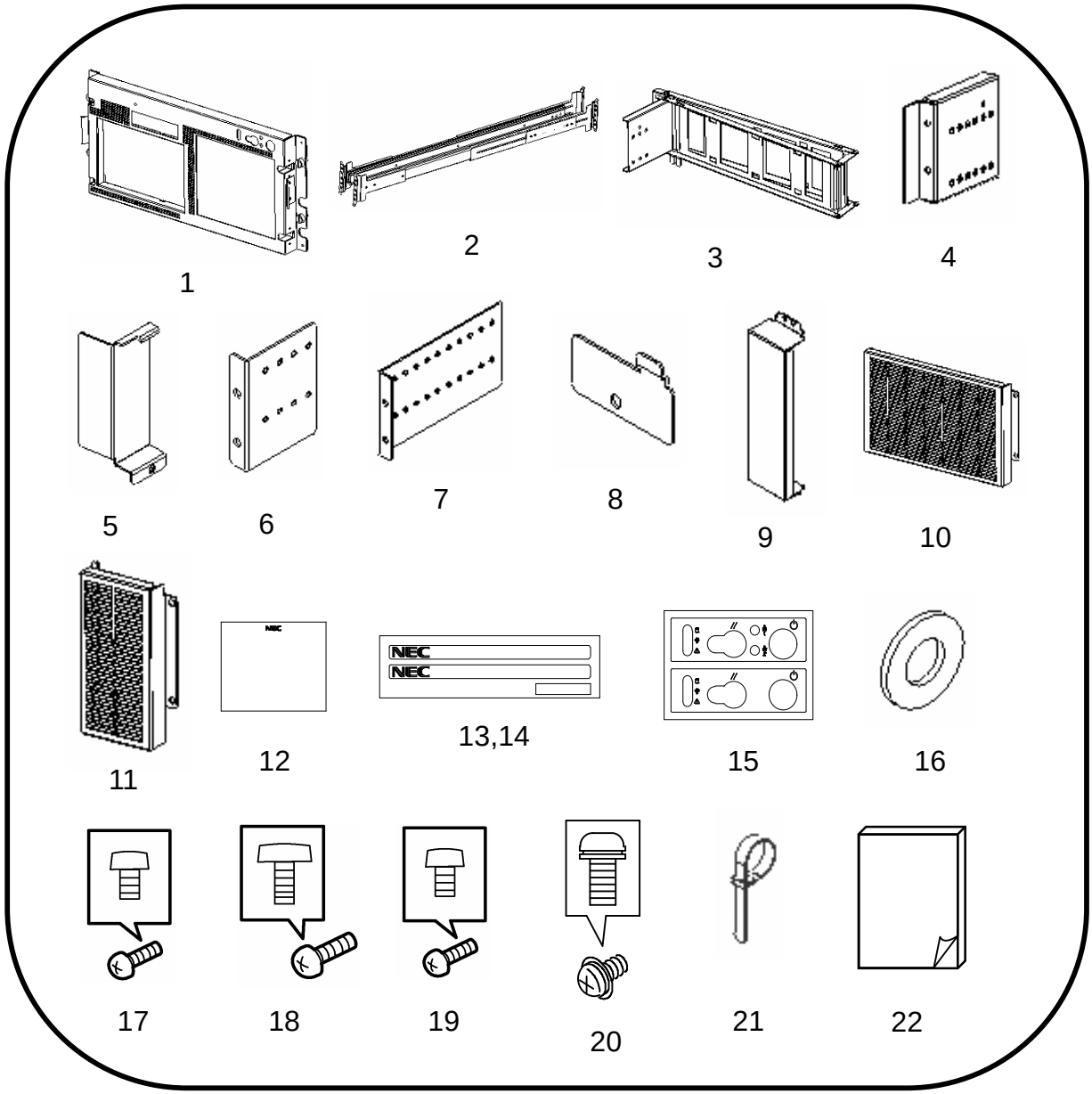
Chapter 1

Preparation for Installation

This chapter describes preparations required for installing the server on a 19-inch rack step by step.

Step 1 Unpacking

The rack conversion kit contains the following components. Make sure that everything listed below are inside and no damage is observed after unpacking.



No.	Part Name	QTY	Notes
1	Front Cover	1	
2	Slide Rail Assembly	2	
3	Cable Arm	1	
4	Arm Bracket	1	
5	Arm Stopper	1	
6	Arm Support (1)	1	EIA Mounting Flange to Rear Mounting Flange : 700_743mm
7	Arm Support (2)	1	EIA Mounting Flange to Rear Mounting Flange : 743_900mm
8	Foot Cover	4	
9	Device Cover	3	For 5.25” bay
10	HDD Cover (1)	1	For Fixed HDD model
11	HDD Cover (2)	1	For Hot Plug ATA HDD model
12	Template	1	
13	Model Name Label	1	120Lg／120Ef 用
14	Model Name Label	1	120Lh／120Lg 用
15	Icon Label	1	
16	Washer	8	For fixing the slide rail assembly
17	Screw A	8	M4 Bind-head screws (color :Gold)
18	Screw B	10	M5 Bind-head screws
19	Screw C	8	#6-32UNC pan-head screws (color :silver)
20	Screw D	11	M4 pan-head screws with Washer (color :Gold)
21	Cable Tie	10	
22	User’s Guide	1	This manual

Step 2 Preparing the Required Tools

Required tools are listed below.

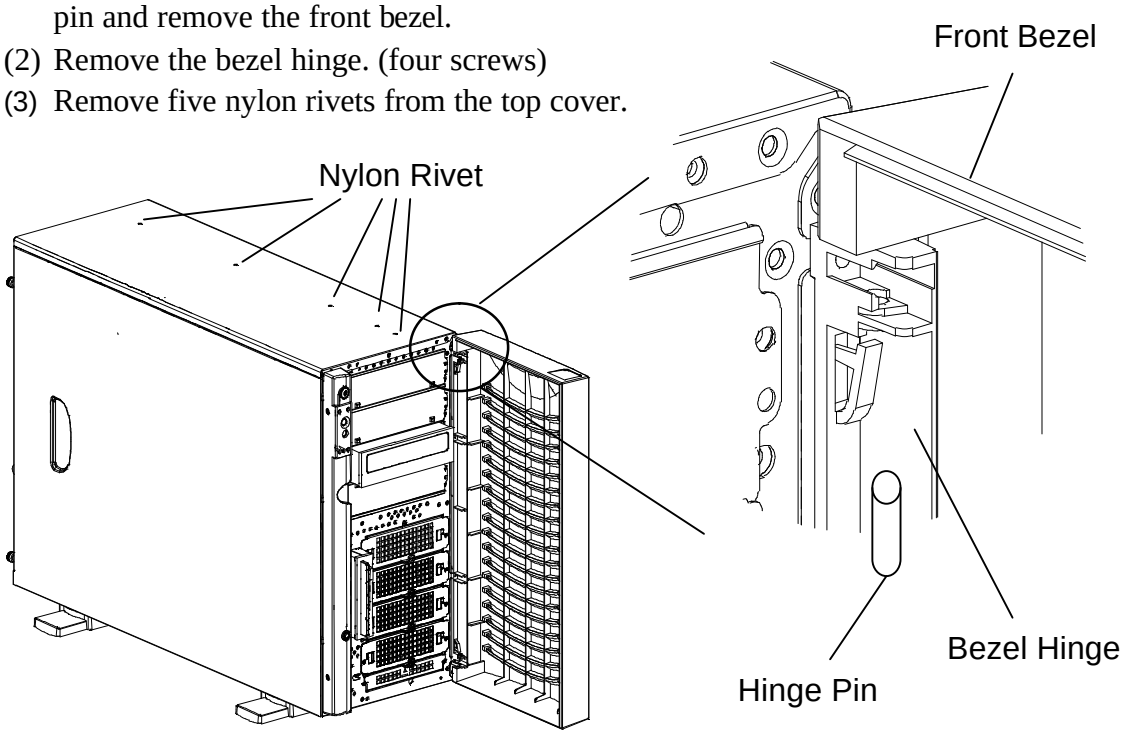
- ✍ Phillips screwdriver

Chapter 2
Installation

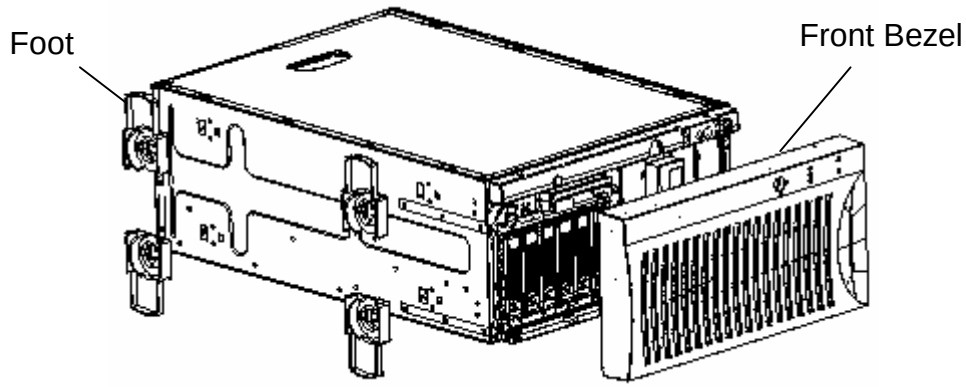
This chapter describes the procedures for installing the rack mountable server into a 19-inch rack.

Step 1 Convert from tower type to rack-mount type

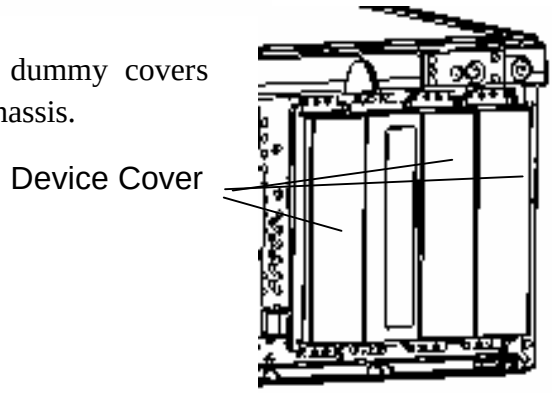
(1) Pull the hinge pin out. Then slide the front bezel to remove it from the other hinge pin and remove the front bezel.
(2) Remove the bezel hinge. (four screws)
(3) Remove five nylon rivets from the top cover.



(4) Remove four feet from the bottom chassis. (Total eight screws)

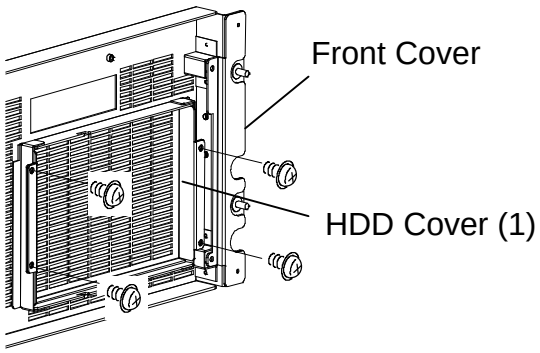


(5) Fix the device covers together with the dummy covers which were installed to blank bays in the chassis.

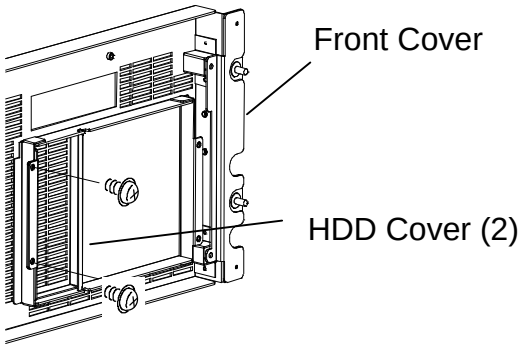


(6) Fix the HDD cover (1 or 2) with the screw (D) to the inside of front cover.
(Do not attach the HDD cover into Hot Plug SCSI HDD (6slots) model.)

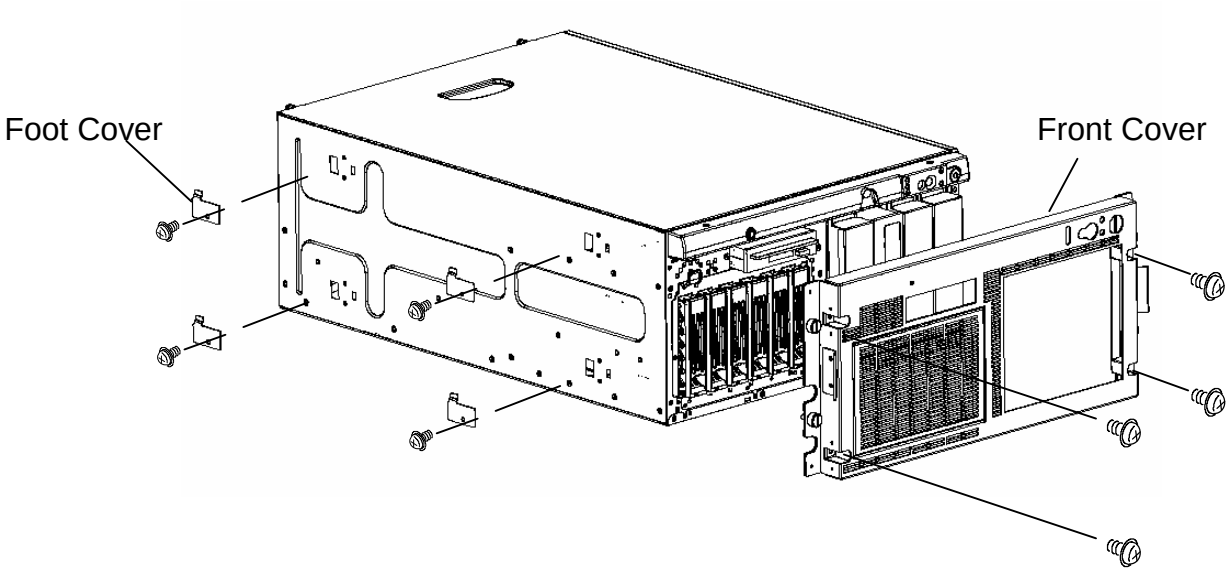
✍ Fixed HDD (4slots) model
Fix HDD cover (1) with four screws (D)



✍ Hot Plug ATA HDD (4slots) model
Fix HDD cover (2) with two screws (D)

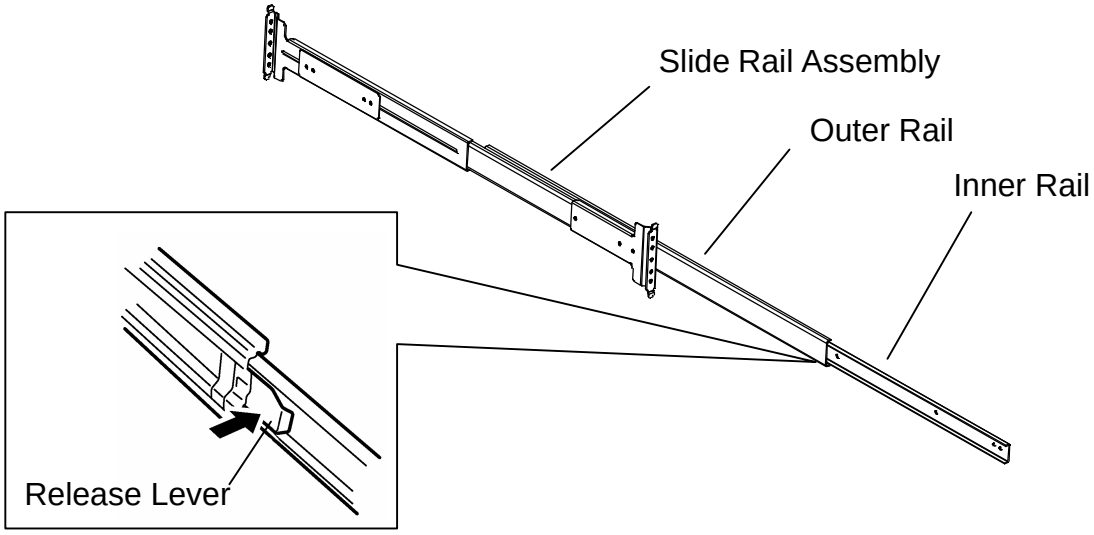


(7) Fix four foot covers with four screws (C) to the bottom of server.
(8) Fix the front cover with four screws (C) to the front of server.

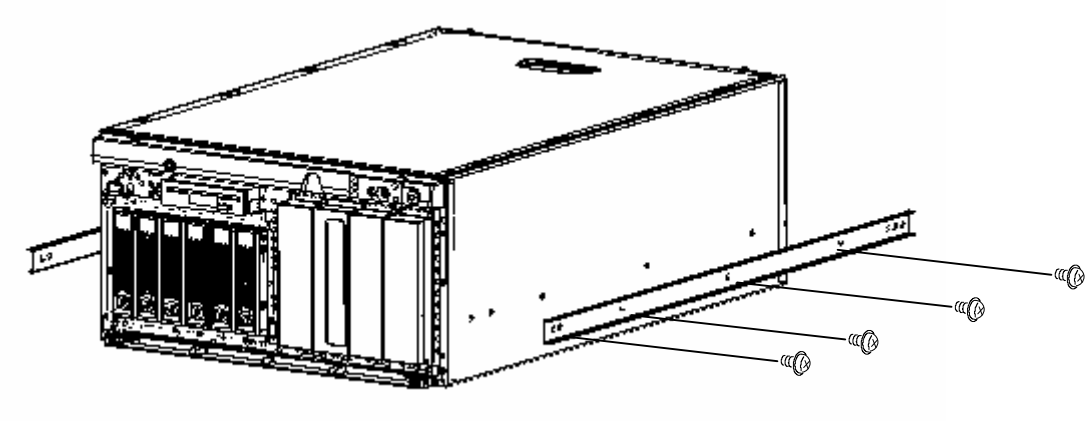


Step2 Mounting the server into the rack

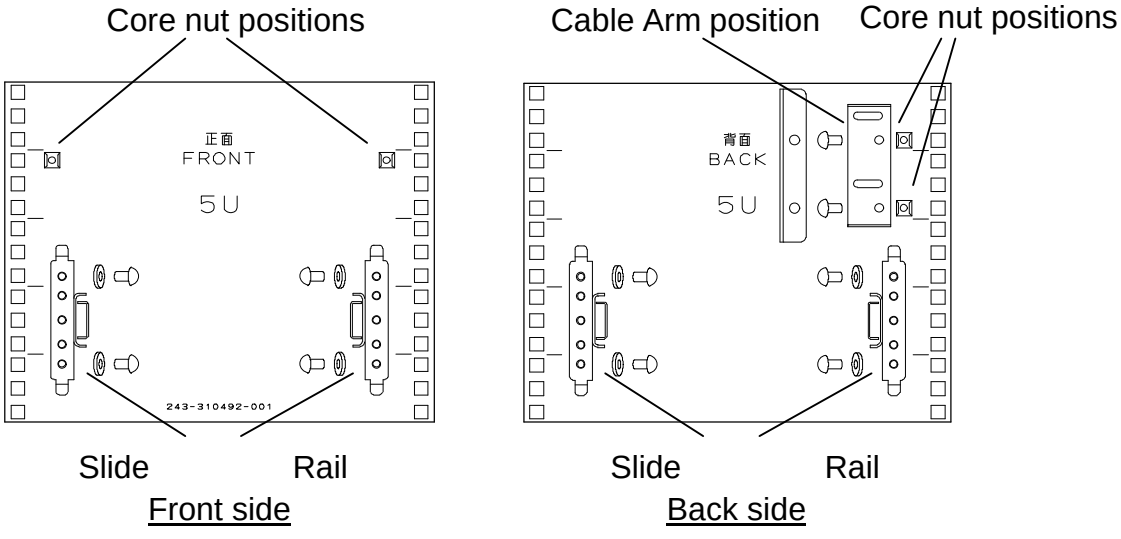
(1) Fully slide the rails out until they lock in place. And while pressing down on the release lever, slide the rails to remove the inner rail.



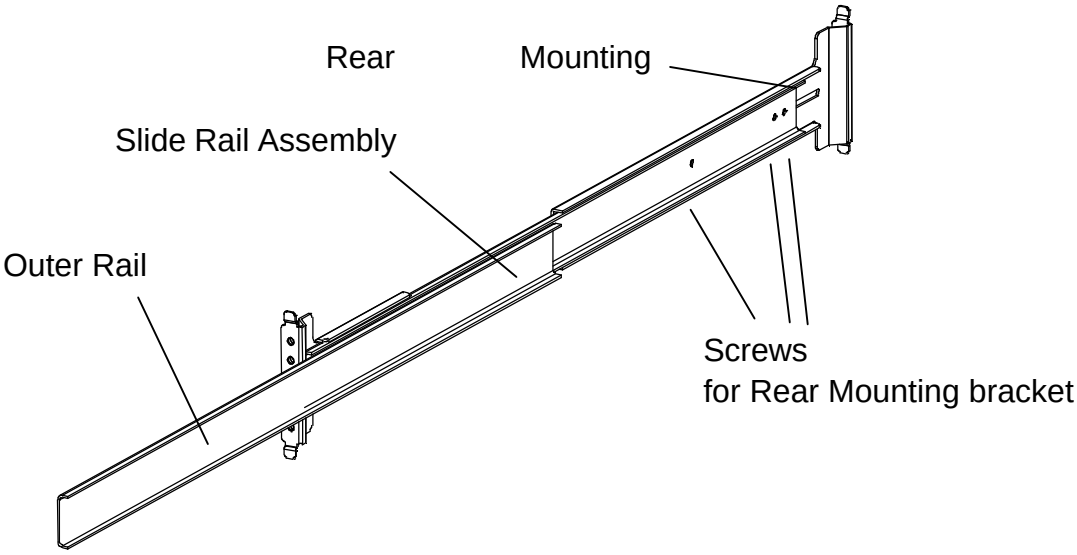
(2) Fix the inner rail with eight screws (A) to both sides of the server.



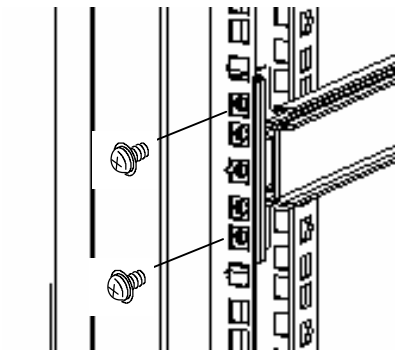
(3) Place the template in the desired location of the rack and attach four core nut that come with the rack assembly to the mount flange in the rack.



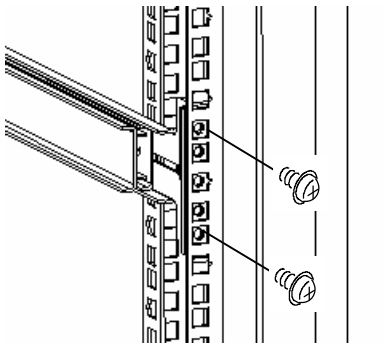
(4) Loosen three screws for fixing the rear mounting bracket in order to move the rear mounting bracket. Repeat this step for the other rail.



(5) Place slide rail assemblies to the mounting flanges of the rack. Attach the washer to the screw (B) and then fix both sides of slide rails with eight screws (B).
Refer to the template for the position.



Front side

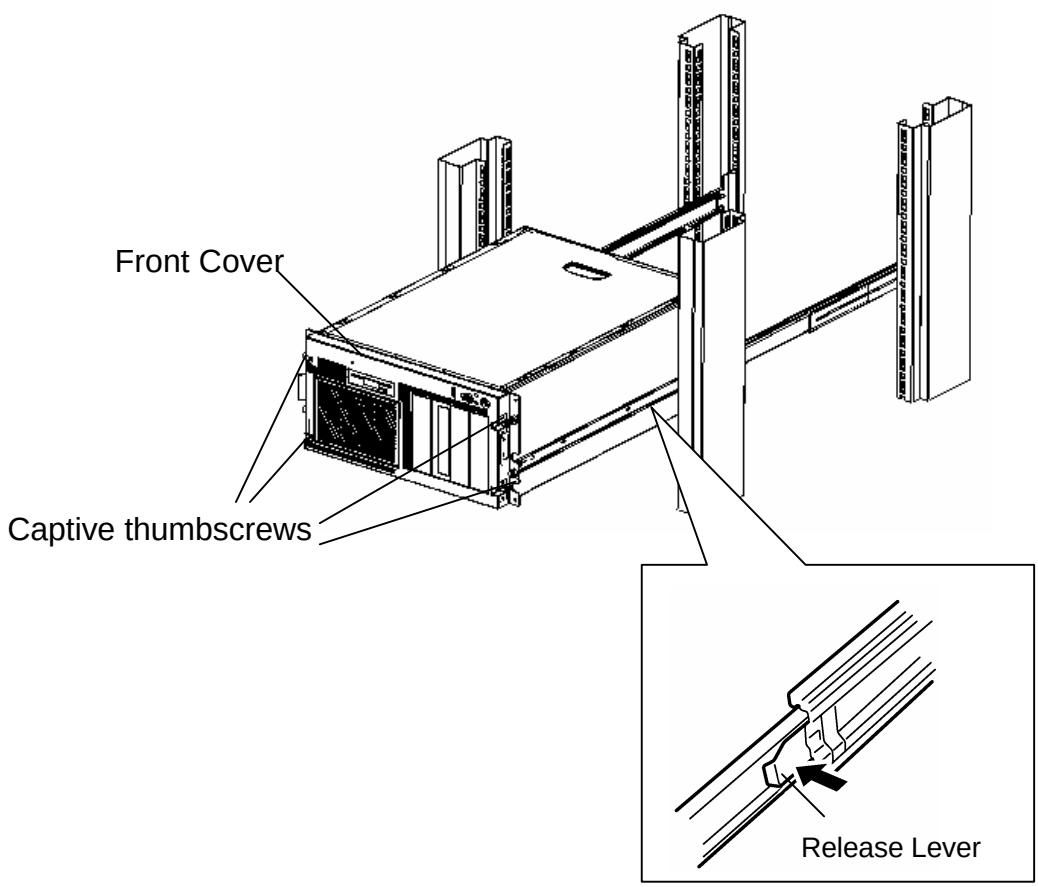


Back side

(6) Tighten six screws that were loosened in (4).

(7) Slide two slide rails out from the rack until they were locked. And then with three or more persons assisting you, lift the server and align the inner rails attached to the both side of the server with the extended rails.
(8) Insert the inner rails into the extended slide rails and push the server into the rack until it stops.
(9) Carefully press down the release levers on the inner rails to release the locks and slide the server all the way into the rack.
(10) To check that the server slides in and out of the rack, grasp the two handles on the front of the server slowly pull the server out and push it back in.
(11) Tighten the four captive thumbscrews to secure the server to the rack.

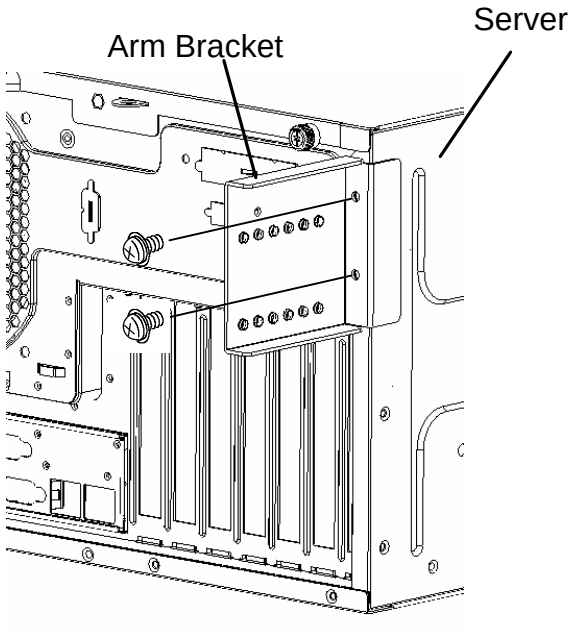
Caution	
	Note sufficiently that your fingers may not be caught between a rail and other mechanical parts or cut by a rail at installation or removal of the server from the rack.



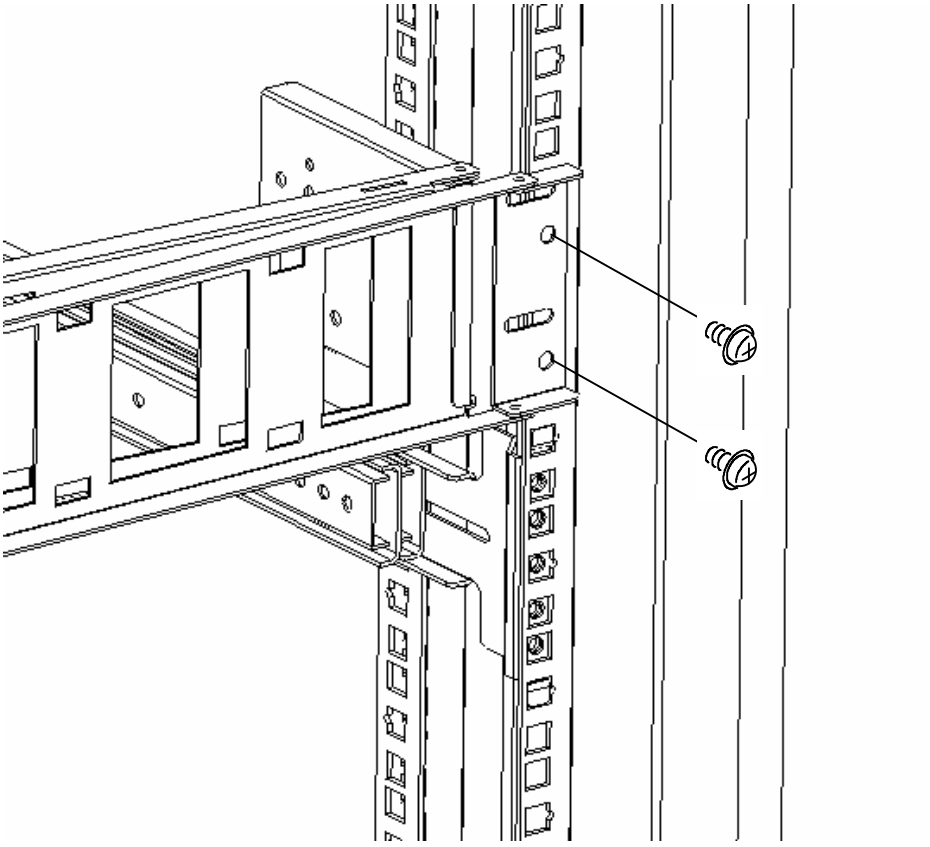
✍ Do not connect any cables before attaching the cable arm.
✍ Secure four captive thumbscrews when mounting the server to the rack.

Step 3 Installing the cable arm and cables

(1) Fix the arm bracket with two screws (D) to the back of the server.

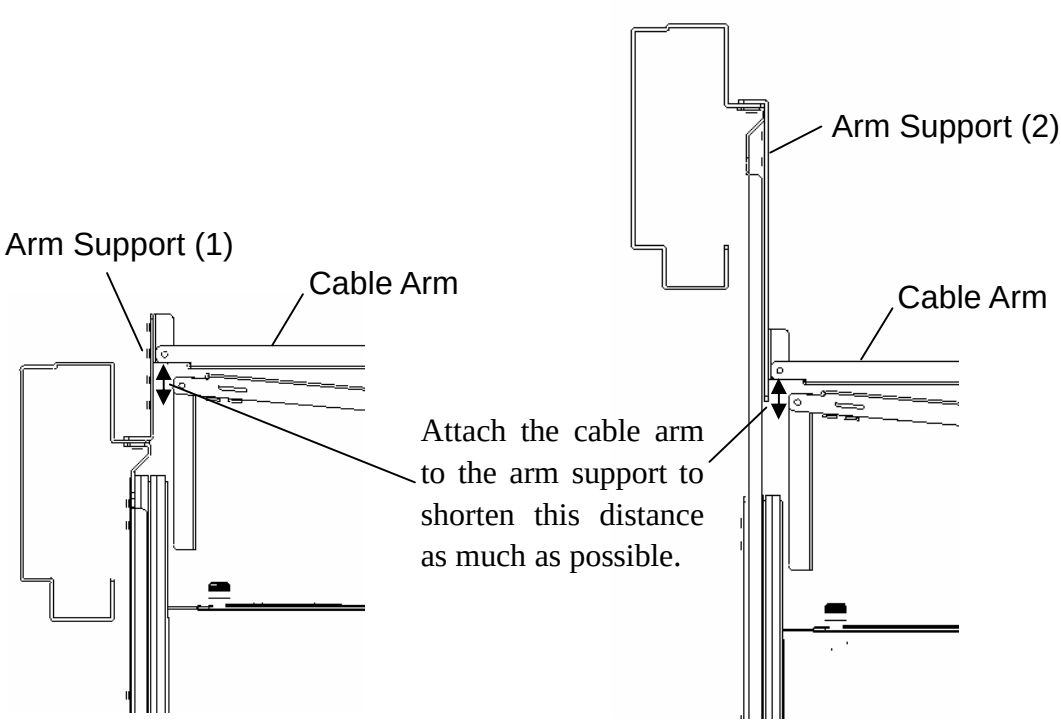


(2) When the distance between the front mounting flange and the rear mounting flange is about 743mm, align one end of the cable arm with the outside of the core nuts installed to the rear of the rack frame and secure it with the two screws (B).



(3) When the distance is from 700mm to 742mm, use the arm support (1) to adjust the position of cable arm.

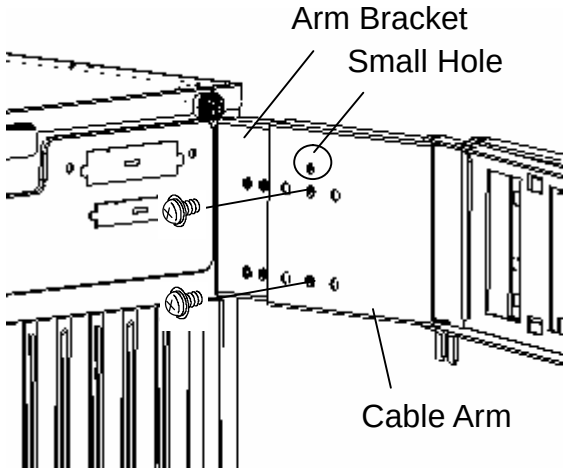
(4) When the distance is from 745mm to 900mm, use the arm support (2) to adjust the position of cable arm..


Arm Support (1)
Cable Arm
Attach the cable arm to the arm support to shorten this distance as much as possible.
Arm Support (2)
Cable Arm

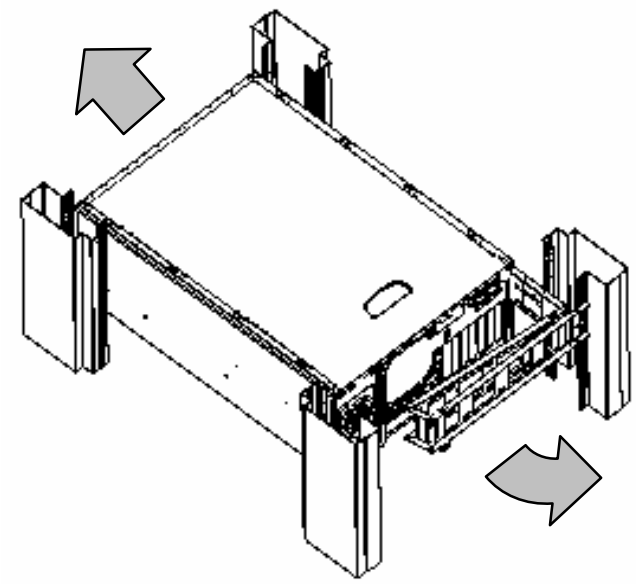
Distance between the front mounting flange and the rear mounting flange：700_742mm

Distance between the front mounting flange and the rear mounting flange：745_900mm

(5) Align the small holes in the cable arm and the arm bracket, and then fix the cable arm with two screws (D) to the arm bracket that fixed in step (1).



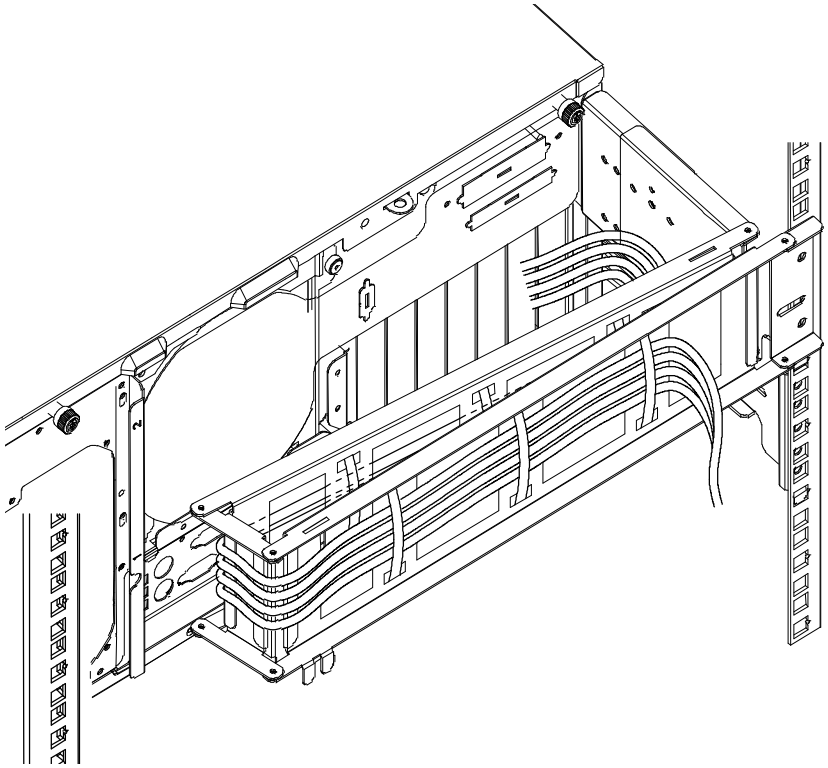
(6) Check to see that no excess force is applied to the cable arm by pulling out the server and pushing it back in. And this cable arm is rotated to backside for connection of cables and exchange of the power supply unit. Check to see that no excess force is applied to the cable arm by rotating it.



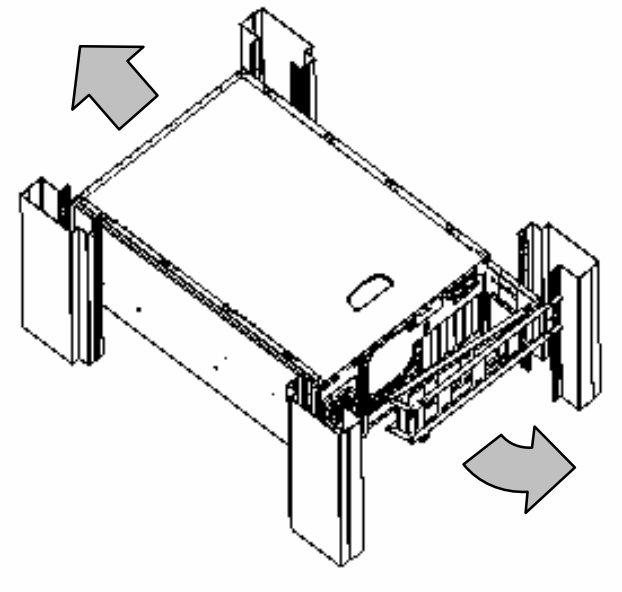
(7) Attach cables to the server according to the manual of the server.

(8) Bundle cables to the cable arm by the repeat ties.

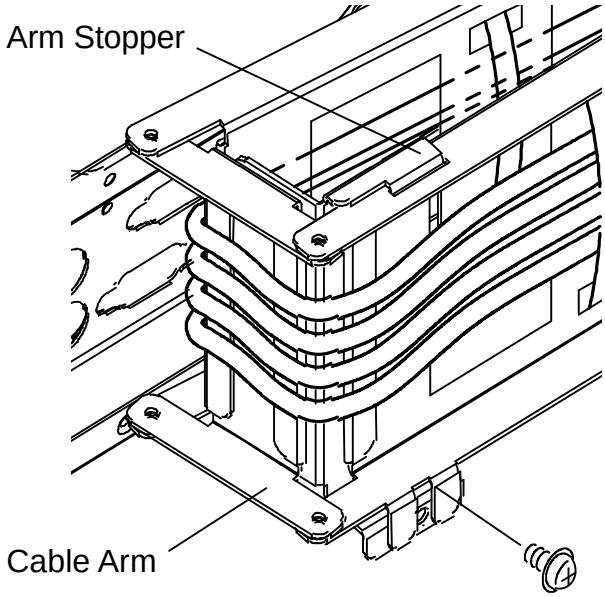
- ✍ Attach cables and repeat ties not to contact the slide rails and neighboring units and the rack.
- ✍ Tie cables slackly between the cable arm and the server to avoid of excess force to be added by pulling out the server and pushing it back in.
- ✍ Attach cables to avoid of excess force to the plug of power cords.



(9) Check to see that no excess force is applied to cables by pulling out the server and pushing it back in. And this cable arm is rotated to backside for connection of cables and exchange of the power supply unit. Check to see that no excess force is applied to cables by rotating it. If the excess force is applied to cables, tie again cables more slackly and check to see that no excess force is applied to cables and check the cable does not touch slide rails, neighboring units, and the rack.

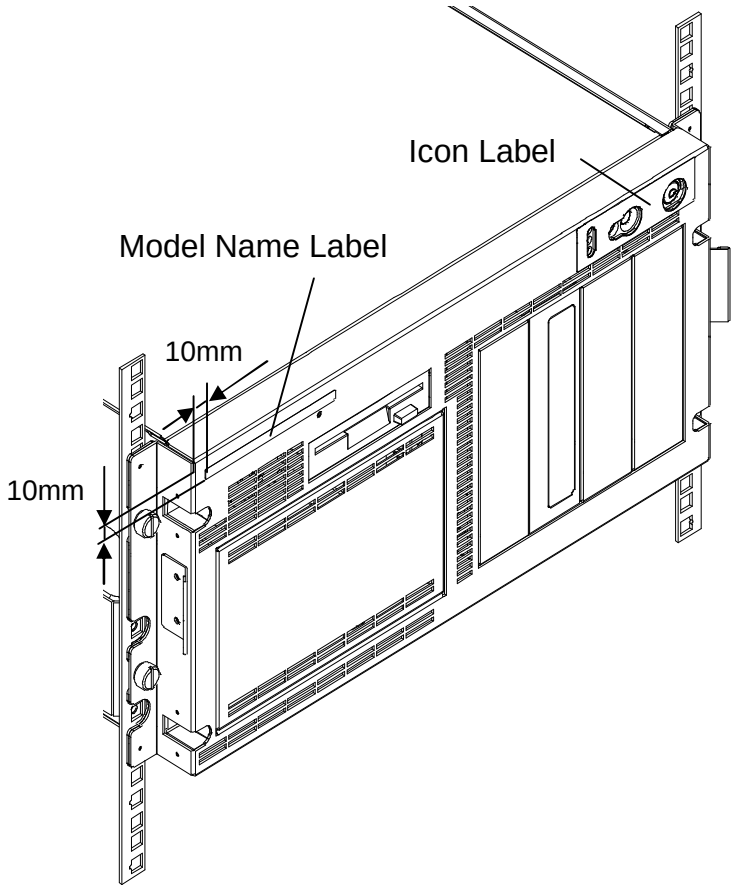


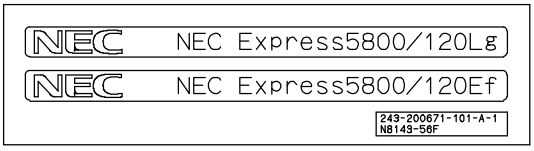
(10) Fix the arm stopper with a screw (D) to the cable arm.



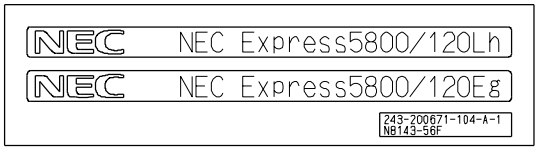
Step 4 Applying the labels

(1) Stick the model name label corresponding to each model on the front cover.
(2) Stick the icon label corresponding to each model on the front cover.



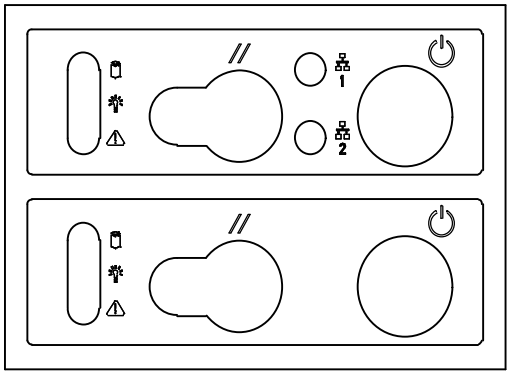


For NEC Express5800/120Lg
For NEC Express5800/120Ef



For NEC Express5800/120Lh
For NEC Express5800/120Eg

Model Name Label



For NEC Express5800/120Lg
For NEC Express5800/120Lh

For NEC Express5800/120Ef
For NEC Express5800/120Eg

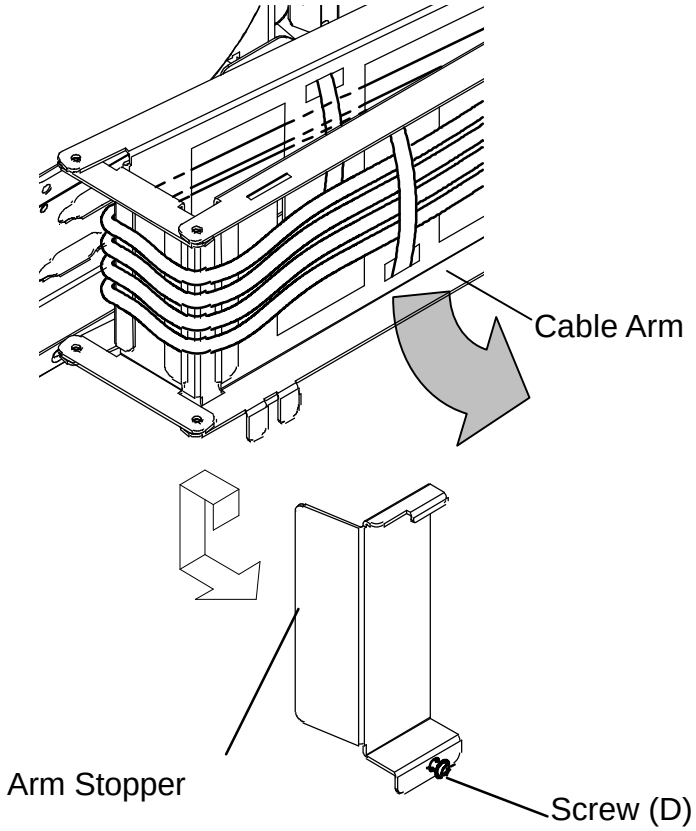
Icon

Chapter 3
Operation

Step 1 Attaching/Removing the arm stopper

This cable arm is rotated to backside for connection of external cables and exchange of the power supply unit. This step describes the procedures for rotating the cable arm to backside.

(1) Loosen the screw (D) and slide the arm stopper to upside and then remove the arm stopper.
(2) Rotate the cable arm to backside.
(3) Attach/remove cables and power supply units.
(4) Rotate the cable arm to previous position.
(5) Attach the arm stopper and then tighten the screw (D) that was loosened in (1).



Step 2 Sliding the server out from the rack

It is necessary to slide the server out from the rack when doing maintenance of the internal components. This step describes the procedures for sliding the server out from the rack.

Caution	
	Note sufficiently that your fingers may not be caught between a rail and other mechanical parts or cut by a rail at installation or removal of the server from the rack.

(1) Loosen four captive thumbscrews on the front of the server.
(2) Grasp the two handles on the front of the server slowly pull it out until it stops (locks) by the release levers.
(3) Do the maintenance of internal components according to the manual of the server.
(4) Carefully press down the release levers on the inner rails to release the locks and slide the server all the way into the rack.
(5) Grasp the two handles on the front of the server slowly push it in until it stops.
(6) Tighten four captive thumbscrews on the front of the server.